

A DIFFERENT ACTIVITY IN GRAMMAR LEARNING IN TURKISH COURSE: EDUCATIONAL COMIC STRIPS

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ABSTRACT

The aim of this study is to determine the effect of educational comic strips on academic achievement and retention of learned items in terms of "structural knowledge" attainments, which is a grammar learning domain in 6th grade. The study is an experimental study in which pretest-posttest paradigm with a control group was used. The study group is consisted of 6/A section (the experimental group, n=30) and 6/B section (the control group, n=30) in Adiyaman Cengiz Topel Secondary School. Based on the lesson plans in Turkish Course Teacher's Guidebook, the researcher tried to achieve the objectives of the course for ten weeks. The difference between the experimental group and the control group is application of educational comic strips on experimental group at evaluation stage of the lesson. Structural Knowledge Achievement Test developed by the researcher was applied as the pretest, the posttest and the retention test and the data of the research were obtained. Independent t-test was applied for the analysis of the data resolved by SPSS 17.0 software. According to data obtained, it was concluded that the educational comic strips enhance the student achievement and retention of learning. Development of educational comic strips, which has a positive effect on achieving structural knowledge attainment of 6th grade grammar, and also for other grammar and basic language skills (listening, speaking, reading and writing) acquisition may make language teaching more effective. Hence, educational comic strips must be included in Turkish course-books and student workbooks.

Key words: Educational Comic Strips, Grammar Instruction, Turkish Course

1. INTRODUCTION

Art which emerged as early as the existence of human and which is the foundation stone of culture constructs and completes the human's personality and enhances his conduct of life. Art awakens and develops creativity in individuals. It enables human to work and produce with pleasure and to approach things from different points of view. Education which includes the art attracts students and arouses interest them and gives students a chance to prove their creativity. For that reason, the art is complementary to education and is to be used in educational environments. Dizzying development of visual quality and technology allows many different forms of art to be used in education and teaching environments. One of these arts is comic strips. Up to now many definitions of comic strips, a creation and art of the 20th century, has been made. (Kirecci, 2008: 23) Yildir (1994: 7) defines the comic strips as "a narrative art which comes into being with the combination of writing and drawing, two main elements completely different from each other while Platin defines it as a narrative form which is drawn by hand, consecutive in a certain continuance, integrated with a text and consisting of printed pictures (Cantek, 1996: 19-20). Comic strips are neither writing nor picture according to Kosta Cerran. It is a synthesis picture or text reaches in relation with another factor, which is used as complementary. That's to say, comic strips are narrative style and an art of fiction formed by the amalgamation of two main elements (text and picture) (Cantek, 2004: a28). When these definitions are combined, the following characteristics of comic strips come to the forefront:

- ❖ Drawing
- ❖ Writing
- ❖ Continuance of drawing and writing
- ❖ Integrity of drawing writing
- ❖ Narrative art

Comic strips can be used in education and teaching environments as an activity by preserving its abovementioned characteristics.

When the resources related with comic strips are examined, (Cantek, 1996; Cantek, 2004; Kirecci, 2008; Ozdemir, 2010) the characteristics of comic strips can be specified as follows:

- ❖ Short text must be used in speech bubbles of comic strips in order to increase comic strips' effectiveness.
- ❖ Characters of comic strips and texts in speech bubbles must be relevant to daily life.

- ❖ Fiction of comic strips must have some features (such as plot, place, time, character staff).
- ❖ Short comic strips consist of 3 to 5 frames must be used in education and teaching environments.
- ❖ Educational comic strips must establish a discussion platform like conceptual caricatures and, a question must be addressed to students to examine if the students attained the objectives at the last frame.
- ❖ Drawings of educational comic strips shall be simple and must evoke associations with objectives of the course.

The difference of educational comic strips from the other visual materials (caricatures in particular) used in education and teaching environments is that it includes the features of fictions (such as plot, place, time and casts). Envisioning and retention increasing character of fiction narrative and visuals are combined in comic strips. When sources related comic strips (Cantek, 1996; Cantek, 2004; Kirecci, 2008; Ozdemir, 2010) are examined, benefits of educational comic strips can be specified as follows:

- ❖ It can develop aesthetic pleasure.
- ❖ It can increase motivation.
- ❖ It can increase concentration.
- ❖ It can establish relation between preliminary information (experiences) and new information, and allow the learned items to be transformed into real life cases.
- ❖ It can develop reading habit.
- ❖ It can increase achievement of the student and retention of learned items by forming visual images.
- ❖ It can allow intuitive learning.
- ❖ It can develop creative thinking and give a critical point of view.
- ❖ It can develop sense of humor.

Theoretical framework for the application of understanding of education via art to education was first drawn by Herbert Read at the beginning of 20th century,. Gotze is also one of the researchers who studied on the role of art in educational process. Gotze mentioned that the blank left by information-based teaching processes in profound understanding can only be filled by art objects. Gotze lays bare that "the whole problem of education via art as setting intuition and thinking in a relation with recognition and knowing". According to Saharabudhe, art affects educational process in two aspects by feeding the cognitive and affective areas of people (Cited in Ozemir, 2007: 76-77). For that reason, comic strips both develop mental processes which are indispensable elements of cognitive area and develop aesthetic pleasure in students which is an important element of the affective area.

According to Kosta Ceran, comic strips consist of many pieces,. Each piece forming a comic strip carries a message in itself. Thus, each reader perceives and evaluates these messages based on his/her own experience, notion, point of view, imagination and mood at that moment (Cantek, 2004: 29) and ensures meaningful learning via reconstruction. Meaningful learning, in terms of constructivism is accepted as "transmission of learned items into real life cases by interrelating between preliminary information (experiences) and new information. (Yurdakul, 2007: 50). Therefore, meaningful learning occurs by using comic strips in education environments.

Considering that the most distinctive characteristic of comic strips is the integration of drawing and writing, it can be thought that the texts formed by comic strips can be read more quickly and this situation can get readers adopt reader habit though the effect of visuals. On the other hand, as comic strips present the text to receiver via speech bubbles, they can also develop speaking skills in comic strips readers. Thus, reading and speaking skills which are among the basic language skills are developed in comic strips readers.

In fictional works, messages are desired to be given to reader by indirect speeches (Akkaya, 2008: 12-13). Since comic strips are visual fictional narratives, the messages are communicated to reader indirectly. According to Ozdemir, since messages are tried to be digested into tissue of text in indirect speech, receivers learn the message by intuition (Ozdemir, 1999: 25). Grammar instruction is a process of conducting activities to induce the voice, pattern and sentence structure of the language to the students by using various methods and by this way enabling them to use the language effectively, properly and correctly (Dolunay, 2010: 277). In this case, comic strips are among the ideal activities for grammar instruction.

According to Kosta Ceran, comic strips enable indirect communication of information as a product of typographic civilization. Optical perception (in the sense of combination of drawing and writing) of this information and the distance during the reading which exists between information communicating object and perceiver give the reader a critical point of view of the message s/he reads (Cantek, 2004: 29). The property of comic strips to enable students gain a critical point of view complies with the approach of National Education Ministry which aims to grow individuals able to think critically (MEB, 2006: 5) with its Turkish course program which was renewed in the years 2004 and 2005.

People learn better and remember what they learn better by narratives like stories and tales. According to Bruner, the reason why people learn and remember what they learn better by stories is that stories help the formation of a context in mind. The fact that many scientific and mathematical hypotheses start their life with short stories or metaphors (Bruner, 1986 and Bruner 1990'dan citation by Hadzigeorgiou and Stefanich, 2000) stresses the importance of narratives. That the comic strips are visual narratives which develop in the context of a certain subject, character staff, place and time can allow messages to be learned and remembered better by forming a context in mind.

The treating effects of humor such as increasing the concentration, prompting thinking, revealing the creative skills, helping in making friends, strengthening communication, increasing the amount and quality of

students' reading (Cornett, 1986, citation by Aydin, 2006: 125) allows it to be used in education environments. In this sense, the visual types where humor can be employed best are caricatures and comic strips.

Using working papers including different application samples related to subjects in the courses and supporting the topics by visual materials would make learning easier (MEB, 2006). Caricatures and comic strips set the best examples for different visuals. Although studies reporting that caricatures increase student achievement, retention of learned items and motivation particularly in grammar were conducted (Keogh, Naylor and Wilson, 1998; Akbaba, 2007; Akkaya, 2011 etc.), no studies were made related to comic strips.

The aim of this research is to determine the effect of educational comic strips on academic achievement and retention of learned items in terms of reaching "structural knowledge" attainments, which is a grammar learning domain in the 6th grade. Answers were sought for following questions to achieve this aim:

- Are there any significant differences between the pretest scores of the experimental and the control group students?
- Are there any significant differences between the post test scores of the experimental and the control group students?
- Are there any significant differences between the retention test scores of the experimental and the control group students?

2. METHODOLOGY

The study is an experimental study and pretest-posttest with a control group model was used. The experimental model is a research model where the data to be observed are produced under direct control of the researcher in order to determine cause and effect relationships. There are two groups in the pretest-posttest with a control group model formed by unbiased assignment, one of which is the experimental group and the other is the control group. Measurements are made before and after the experimental treatment in both groups (Karasar, 2003:97). Among 6th grade classes in Adiyaman Cengiz Topel Secondary School 6/A section was determined as the experimental group and 6/B section was determined as the control group randomly. The lessons were conducted by the researcher in both groups (control and experimental). The lesson plans included in Turkish Course Guidelines for Teachers were taken as basis both for the control and the experimental group. The treatment took 10 weeks in accordance with Turkish Course Unitized Annual Lesson Plan. The difference between the experimental group and the control group is the application of educational comic strips in the experimental group at the evaluation stage.

2.1. Study Group

The study group of this research comprises of the 6th grade students in Adiyaman Cengiz Topel Secondary School 2012-2013 education year. Gender distribution of the 6th grade students participated in the study is as follows:

Table 1. Gender distribution of the study group

Gender	Experimental Group	Control Group
Female	19	21
Male	11	9
Total	30	30

2.2. Data Collection Tools

2.2.1. Structural Knowledge Achievement Test (SKAT)

Structural knowledge achievement test (SKAT) was developed by the researcher to determine the effect of conducting the structural knowledge, one of the grammar lesson subjects of 6th grade Turkish Course instruction, via comic strips, on student achievement and retention of the learned items. Table of specifications was prepared related to the attainments of "structural knowledge" topic and a total of 30 questions were formed, which consisted of three questions for each section. Then, SKAT was piloted on 87 7th grade students. The questions which were answered by the students as right, wrong and empty were determined, and difficulty index, selectivity index and standard deviation of questions were found. According to Tan and Erdogan, the questions with selectivity value is between lower than 0.20 are the ones to be removed from test, the questions with selectivity index between 0.20 and 0.40 are the ones to be corrected, and the questions with selectivity index is higher than 0.40 are very well questions (Tan and Erdogan, 2004: 218). Therefore, the 1st, 5th, 7th, 9th, 10th, 12th and 14th questions whose selectivity indexes are lower than 0.40 and the 13th, 23rd and 29th question with selectivity indexes higher than 0.40 were removed from SKAT by taking the opinions of two experts. Thereby, a SKAT consisting of 20 questions was obtained. As a result of analyses made, mean difficulty index of SKAT was calculated as (p) 0.63 and mean selectivity index was calculated as (r) 0.50. Obtained analysis values indicate that the SKAT is useable for application.

2.3. Preparation of the Application Material

One educational comic strip related to each of the 6th grade structural knowledge attainments were designed by the researcher and drawn by Berk Ozdemir. Formed comic strips were presented to 2 domain experts and it was determined that 2 domain experts are of the opinion that "the formed comic strips reflect the objectives".

2.4. Collection and Analysis of Data

In this study SKAT was applied to both the experimental and the control group as the pretest at the beginning in order to determine their preliminary information. As result of a10-week instruction, the effect of educational comic strips were tried to be examined by applying SKAT to both the experimental group and the control group as posttest. SKAT was applied to the experimental and the control groups as retention test four weeks after the application in order to examine the effect of comic strips on retention of acquired information.

The data obtained in this study was analyzed statistically by using SPSS 17.0 package software. The statistical analysis was made with independent t-test.

3. RESULTS

Data collected were analyzed according to the questions set forth depending on the aims of the study in this section.

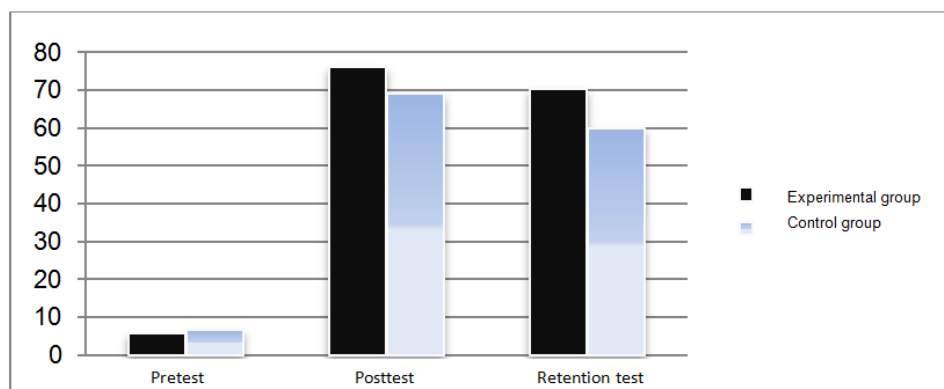


Fig. 1. Means of the scores received by students in the experimental and the control group

When evaluating Figure 1, mean scores on the pretests students in the experimental and the control group received are seen to be close to each other. Considering the data obtained from the posttest and the retention test, the means of the scores students in the experimental group received from these tests are seen to be higher than the scores of students in the control group. Independent t test was performed in order to evaluate if the difference between the test scores of students in the experimental and the control group is statistically significant.

Table 2. Independent sample T-Test results of students in the experimental and the control groups with regard to pretest scores

Groups	N	\bar{X}	Ss	Sd	t	p
Experimental	30	5.71	4.02	54	0.874	0.386
Control	30	6.61	3.61			

When Table 2 is examined, it is seen that according to independent t test results [$t=0.874$; $p>0.05$], there are no statistically significant differences between the 6th grade Turkish course structural knowledge attainments of the experimental and the control group in terms of preliminary information. It is seen that the mean of the pretest scores received by the students in the experimental group is \bar{X} :5.71 and that of the students in the control groups is \bar{X} : 6.61. Considering these values, it can be seen that the preliminary information of the 6th grade students in both groups were the same in Turkish course structural knowledge objectives.

Table 3. Independent sample t- test results related with the posttest scores of students in the experimental and the control group

Groups	N	\bar{X}	Ss	Sd	t	p
Experimental	30	75.89	7.58	54	3.274	0.002
Control	30	68.93	8.32			

When the Table 3 is examined, mean scores were determined to be 75.89 for the experimental group and to be 68.93 for the control group in the post-test applied after instruction supported by educational comic strips. Independent groups t-test was made in order to determine if the difference between the mean posttest scores of the experimental and the control group was significant and this difference was found to be significant as a result of t-test ($t=3.274$; $p<0.05$). These values indicate that the grammar instruction supported by educational comic strips is effective on student achievement.

Table 4. Independent random t-test results relating to retention test scores of students in the experimental and the control group

Gruplar	N	\bar{X}	Ss	Sd	t	p
Experimental	30	70.18	7.76	54	4.332	0.000
Control	30	60.00	9.72			

When the Table 4 is examined, mean score in retention test which was applied four weeks after the instruction supported by educational comic strips was determined as 70.18 for the experimental group and as 60.00 for the control group. T-test was applied in order to determine if the difference between the posttest scores of students in the experimental and the control groups ($t=4.332$; $p<0.05$) were significant and this difference was found to be significant. These values indicate that grammar instruction supported by educational comic strips is effective on retention of learned items. On the other hand, higher scores of the experimental group compared to the control group in both the posttest and the retention test can be explained by the fact that comic strips supported instruction applied in the experimental group forms visual images by making construction, integration and repetition of information in the mind easier.

4. DISCUSSION AND CONCLUSION

The visuals (comic strips, caricature etc.) which has been increasingly influential in today's world was started to be used in education environments. There are many studies made related to the fact that the use of visuals in education has a positive effect on student achievement and retention of learned items (Akbaba, 2007; Akkaya, 2011 etc.). When these studies are examined, it is seen that among various types of visuals, particularly caricatures are used in education environments. In this study, the effect of comic strips, one of the visual types, on achievement and retention of learned items has been examined.

This is an experimental study and pretest-posttest with a control group model was used in the study. The students in the experimental and the control group are seen to receive close scores in the pretest. This situation indicates that their structural knowledge attainments and preliminary information are close to each other. The mean posttest scores of the students in the experimental group is \bar{X} : 75.89 while this score is \bar{X} : 68.93 for the students in the control group. Considering these values, it is seen that the comic strips affect academic achievement of the students in the experimental group in terms of structural knowledge attainments.

It is seen that the mean retention test scores received by the students in the experimental group is \bar{X} : 70.18 while the mean scores of the students in the control group is \bar{X} : 60.00. These values indicate that comic strips supported grammar instruction is effective on retention of learned items. On the other hand, higher scores of the experimental group compared to the control group in both the posttest and the retention permanency test can be explained by the fact that comic strips supported instruction forms visual images by making construction, integration and repetition of learned information easier.

The conclusions of this study complies with the conclusion reached by a study entitled as "Grammar Instruction via Caricatures" by Akkaya (2011) that the caricatures among the visual types which affect academic achievement and retention of learned items. This situation indicates that the visuals affect language learning positively. On the other hand, the fact that the similar conclusions were found in the study by Ozdemir (2010) entitled as "The Effects of Comic Strips on Achievement of 6th Grade Students in Heat Transfer Concept" is a proof for that the recommendation that visuals, particularly comic strips, must be used in education environments.

The development of educational comic strips which have positive effects on achieving structural knowledge attainments and increasing the retention of learned items, for the other grammar and basic language skills (listening, speaking, reading and writing) attainments can make language teaching more effective. Therefore, educational comic strips must be included in course books and student workbooks.

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SAMPLES OF ACTIVITIES

Activity 1. Educational Comic Strips with Regard to the Roots Attainment



Activity 2. Comic Strips Sample Related with the Attainment of Derivational Affixes

